

CLAIMS

What is claimed is

1. An image forming apparatus comprising:

a photo conductor;

an exposing device having a light emitting diode array for emitting light and a lens array through which the light passes for forming an image composed of a plurality of dots on said photo conductor, wherein the amount of light emission of said light emitting diode is varied for a gradational representation of the each of the plurality of dots; and

said exposing device further comprising defocusing means for imaging the light beam out of focus on said photo conductor when a percentage of a number of luminous dots changed in the amount of light emission among all of the dots composing said image is a predetermined value or larger.

2. The image forming apparatus according to claim 1, wherein the defocusing is effectuated when the percentage of the luminous dots changed in the amount of light emission is 60 or larger.

3. The image forming apparatus according to claim 1, wherein the defocusing means can shift the exposing device to defocus the image.

4. The image forming apparatus according to claim 1, wherein the defocusing means can shift the light emitting diode array to defocus the image.

5. The image forming apparatus according to claim 1, wherein the defocusing means can shift the lens array to defocus the image.

6. The image forming apparatus according to claim 1, wherein the exposing device is used with a plurality of image forming apparatuses and each exposing device includes a defocusing means that may be defocused by one of shifting the exposing device, shifting the light emitting diode array to defocus the image and shifting the lens array to defocus the image.

7. An image forming apparatus comprising:

a photo conductor corresponding to a plurality of colors;

an exposing device having a light emitting diode array for emitting light a lens array through which the light passes to form an image composed of a plurality of dots on said photo conductor, wherein the amount of light emission of said light emitting diode is varied for a gradational representation of the each of said plurality of dots; and

said exposing device further comprising defocusing means for imaging out of focus on said photo conductor the light corresponding to the color of high brightness among said plurality of colors.

8. The image forming apparatus according to claim 7, wherein the defocusing means can shift the exposing device to defocus the image.

9. The image forming apparatus according to claim 7, wherein the defocusing means can shift the light emitting diode array to defocus the image.

10. The image forming apparatus according to claim 7, wherein the defocusing means can shift the lens array to defocus the image.

11. The image forming apparatus according to claim 7, wherein the exposing device is used with a plurality of image forming apparatuses and each exposing device includes a defocusing means that may be defocused by one of shifting the exposing device, shifting the light emitting diode array to defocus the image and shifting the lens array to defocus the image.

12. An image forming apparatus comprising:

a plurality of photo conductors corresponding to a plurality of colors;

a plurality of exposing devices, each having a light emitting diode array for emitting light a lens array through which the light passes to form an image composed of a plurality of dots on said photo conductor, wherein the amount of light emission of said light emitting diode is varied for a gradational representation of the each of said plurality of dots; and

each of said plurality of exposing devices further comprising defocusing means for imaging out of focus on a photo conductor of said plurality of photo conductors the light corresponding to the color of high brightness among said plurality of colors.

13. The image forming apparatus according to claim 12, wherein for at least one of said plurality of exposing devices said defocusing means can shift said at least one exposing device to defocus the image.

14. The image forming apparatus according to claim 12, wherein for at least one of said plurality of exposing devices said defocusing means can shift said light emitting diode array to defocus the image.

15. The image forming apparatus according to claim 12, wherein for at least one of said plurality of exposing devices the defocusing means can shift the lens array to defocus the image.